## **Summary of Safety and Effectiveness Information**

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

Submitter's Name:

Richard M. Vaught Dade Behring Inc. P.O. Box 6101

Newark, DE 19714-6101

**Date of Preparation:** 

August 19, 2003

Name of Product:

Dimension® N-acetylprocainamide (NAPA) Flex® reagent cartridge

method

FDA Classification Name:

N-acetylprocainamide test system (21CFR§862.3320; 91LAR)

**Predicate Device:** 

Dade Behring aca® NAPA analytical test pack (K833378)

#### **Device Description:**

The Dade Behring Dimension® N-acetylprocainamide (NAPA) Flex® reagent cartridge method is an *in vitro* diagnostic test that consists of prepackaged reagents in a flexible plastic cartridge for use only on the Dimension® clinical chemistry system. The Dimension® NAPA Flex® reagent cartridge assay is based on a homogenous particle-enhanced turbidimetric inhibition immunoassay (PETINIA) which uses a latex particle N-acetylprocainamide conjugate and monoclonal N-acetylprocainamide specific antibody. N-acetylprocainamide present in the sample competes with N-acetylprocainamide on the particles for available antibody, thereby decreasing the rate of aggregation. Hence, the rate of aggregation is inversely proportional to the concentration of N-acetyl procainamide in the sample. The rate of aggregation is measured using bichromatic turbidimetric readings at 340 nm and 700 nm.

#### Intended Use:

The Dimension® N-acetylprocainamide (NAPA) Flex® reagent cartridge method is used for the quantitative determination of N-acetylprocainamide in serum or plasma. Measurements may be used in therapeutic drug monitoring to maintain adequate procainamide therapy.

#### **Comparison to Predicate Device:**

A summary of the features of the Dade Behring Dimension® NAPA Flex® reagent cartridge method and the predicate device, the Dade Behring aca® NAPA analytical test pack (K833378) is provided in the following chart:

#### Dimension® NAPA Flex® cartridge

### aca® NAPA analytical test pack

Intended Use	in vitro diagnostic use	in vitro diagnostic use	
Assay Range	0.5 - 30.0  ug/mL	$1.0-16.0~\mathrm{ug/mL}$	
Sample size	2 uL	40 uL	
Measurement	PETINIA turbidimetric rate 340 nm and 700nm	EMIT® <sup>1</sup> colorimetric rate 340 nm	

<sup>&</sup>lt;sup>1</sup> Registered trademark of Syva Company, Dade Behring Inc.

Split-sample comparative performance was evaluated between the Dade Behring Dimension® NAPA Flex® method and the predicate aca® NAPA method and the results are summarized below:

Comparative		Intercept	Correlation	
Method	Slope	(ug/mL)	Coefficient	n
Dade Behring				
aca® NAPA test pack	0.96	-0.03	0.993	73

#### **Comments on Substantial Equivalence:**

Both the Dade Behring Dimension® N-acetylprocainamide (NAPA) Flex® reagent cartridge method and the aca® NAPA analytical test pack method are homogenous immunoassays intended for the quantitative determination of N-acetylprocainamide in serum or plasma. Split-sample comparative data demonstrated good agreement (correlation) between the methods.

#### Conclusion:

The Dade Behring Dimension® N-acetylprocainamide (NAPA) Flex® reagent cartridge method and the predicate Dade Behring aca® NAPA analytical test pack method (K833378) are substantially equivalent based on their intended use, design and comparison performance characteristics as described above.

Richard M. Vaught Regulatory Affairs and Compliance Manager August 19, 2003

# DEPA

# **DEPARTMENT OF HEALTH & HUMAN SERVICES**

Food and Drug Administration 2098 Gaither Road Rockville MD 20850

# OCT 3 1 2003

Mr. Richard M. Vaught
Regulatory Affairs and Compliance Manager
Dade Behring Inc.
Glasgow Business Community
Bldg. 500, M.S. 514
P.O. Box 6101
Newark, DE 19714-6101

Re:

k032564

Trade/Device Name: Dimension® N-acetylprocainamide (NAPA) Flex® reagent

cartridge method

Regulation Number: 21 CFR 862.3320 Regulation Name: Digoxin test system

Regulatory Class: Class II Product Code: LAN Dated: August 19, 2003 Received: August 20, 2003

Dear Mr. Vaught:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (301) 594-3084. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html.

Sincerely yours,

Steven I. Gutman, M.D., M.B.A.

Steven Butman

Director

Office of In Vitro Diagnostic Device

**Evaluation and Safety** 

Center for Devices and

Radiological Health

Enclosure

# **Indications For Use Statement**

Device Name:		
Din	nension® N-acetylprocainamide (NAPA) Flex® reagent cartridge method	
Indications for Use:	•	
met	The Dade Behring Dimension® N-acetylprocainamide (NAPA) Flex® reagent cartridge method is used to measure N-acetylprocainamide in serum or plasma. Measurements may be used in therapeutic drug monitoring to maintain adequate procainamide therapy.	
	Rm Vaught	
	Richard M. Vaught Regulatory Affairs and Compliance Manager	
	August 19, 2003	
(PLEASE DO NOT	WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED	
Concurrence	e of CDRH, Office of Device Evaluation (ODE)	
	Division Sign-Off for Dean Cooper	
	Office of In Vitro Diagnostic Device Evaluation and Safety	
	510(k) K03 2564	
Prescription Use V (Per 21 CFR 801.109	OR Over-the-counter Use	

(Optional format 1-2-96)